

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 6, 11 and 25 are amended. Claims 40-58 are added. Claims 1-58 are pending in the application.

I. Rejection under 35 U.S.C. § 102

In the Office Action, at page 4, numbered paragraph 4, claims 1-13, 17-23, 25, 29-37 and 39 were rejected under 35 U.S.C. § 102(b) as being unpatentable over Yamashita et al. (U.S. Patent No. 5,808,693). This rejection is respectfully traversed because Yamashita does not discuss or suggest:

a signal identifying unit that receives an input signal and identifies the type of the input signal;

a signal changing unit that switches from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal, if the identified input signal is determined to be abnormal,

as recited in amended independent claim 1.

Yamashita further does not discuss or suggest:

receiving the input signal and identifying a type of the input signal that is received;

switching from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that whether the next input signal is abnormal is checked, if the input signal is checked and is determined to be abnormal,

as recited in amended independent claim 6.

In addition, Yamashita does not discuss or suggest:

a signal identifying unit receiving an input signal and identifying the type of received input signal;

a signal changing unit switching from the checked input signal to check a next input signal based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal,

as recited in amended independent claim 11.

Yamashita also does not discuss or suggest:

receiving an input signal and identifying the type of received input signal;

switching from the checked input signal to a next received and identified input signal based on set data corresponding to the identified type of the input signal to check whether the next received and identified input signal is abnormal,

as recited in amended independent claim 25.

As a non-limiting example, the present invention as set forth in claim 1, for example, is directed to a display device that includes a signal identifying unit, a signal checking unit and a signal changing unit. The identifying unit receives an input signal and identifies the type of the signal. The signal checking unit checks whether the input signal is abnormal or normal. The signal changing unit switches from the checked input signal to a next input signal to be checked for abnormality based on set data corresponding to the identified type of the input signal to check so that the signal checking unit checks whether the next input signal is abnormal, if it is determined that the identified input signal is abnormal.

Yamashita discusses a video display apparatus with power saving modes including two video signal input terminals 1 and 2 which are connected to contacts 3a, 3b of a selector 3. The sync signals obtained at the movable contact 3c of the selector 3 comprised of horizontal and vertical sync signals supplied to the video signal input terminal are supplied through a sync separator 6 to a microcomputer 9. A decision is made as to whether the horizontal and vertical sync signals are normal sync signals, and if the signals are normal, the video display apparatus is set to normal mode so the video signals may be displayed. In Yamashita, if the horizontal and vertical sync signals are not normal, a NO decision is returned, the process pauses for one second and the movable contact 3c of the selector 3 is switched to a fixed contact 3b in response to a control signal, whereby the signal from video signal input terminal 2 is supplied to the movable contact 3c. If 5 seconds have elapsed since a timer was set, the power save mode is determined based on the sync signals.

While Yamashita does check for the normality or abnormality of the signals, Yamashita does not identify types of the received signals. The Examiner alleges that Yamashita discusses identifying the type of the input signal, stating that "selector 3 shown in Figure 1 determines the input signal supplied from input terminals 1 and 2". The Applicants respectfully disagree that selector 3 identifies the type of the input signal.

Yamashita discusses that, for example, video signal output terminals of a computer are connected to two video signal input terminals 1 and 2, which are connected to fixed contacts 3a,

3b of the selector 3. The selector 3 of Yamashita merely provides for switching between the input terminals 1 or 2, but Yamashita does not discuss or suggest that the selector actually identifies a type of input signal.

Further, Yamashita does not discuss or suggest that the checked input signal is switched or changed to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal, if the identified input signal is determined to be abnormal. Yamashita does discuss that a timer sets a set duration of time in which to check the signal, but the time required to check the input signal is not set based on the identified type of the input signal. Yamashita does not distinguish between the types of signals in order to make a determination as to the switching or changing from one signal to another to be checked. Yamashita specifically does not discuss that data is set corresponding to the identified type of input signal and that the signal is switched to a next input signal to be checked based on that set data.

In contrast, the present invention of claim 1, for example, switches or changes the signal based on at least one of a number of times the signal is checked, the time required to check the signal, and the order of checking the signal. At page 4, paragraph 0014, the present specification states that "the user designates data on the number of times signals input from the computer, DVD player, TV or a VCR are checked, the time required to check the signals, [and] the order of checking the signals...." Further, the signal changing unit 114 checks the number of times the D-sub analog signal, the DVI digital signal, the VIDEO signal, and the TV signal are checked, the time required to check the D-sub analog signal, the DVI digital signal, the VIDEO signal, and the TV signal, and the order of checking the D-sub analog signal, the DVI digital signal, the VIDEO signal, and the TV signal, thereafter moving from the checked signal to another signal. Yamashita does not suggest that the signal to be checked is switched from one signal to another based on set data corresponding to the identified type of input signal, specifically data as to at least one of a number of signal checking times, the time required to check the signal, and the order of checking the signal.

Therefore, as Yamashita does not discuss or suggest "a signal identifying unit that receives an input signal and identifies the type of the input signal; [and] a signal changing unit that switches from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal, if the identified input signal is determined to be abnormal," as recited in amended independent claim 1, does not discuss or suggest "receiving

the input signal and identifying a type of the input signal that is received; [and] switching from the checked input signal to a next input signal to be checked based on set data corresponding to the identified type of the input signal so that whether the next input signal is abnormal is checked, if the input signal is checked and is determined to be abnormal,” as recited in amended independent claim 6, does not discuss or suggest “a signal identifying unit receiving an input signal and identifying the type of received input signal; [and] a signal changing unit switching from the checked input signal to check a next input signal based on set data corresponding to the identified type of the input signal so that the signal checking unit checks whether the next input signal is abnormal,” as recited in amended independent claim 11, and does not discuss or suggest “receiving an input signal and identifying the type of received input signal; [and] switching from the checked input signal to a next received and identified input signal based on set data corresponding to the identified type of the input signal to check whether the next received and identified input signal is abnormal,” as recited in amended independent claim 25, claims 1, 6, 11 and 25 patentably distinguish over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Claims 2-5, 7-10, 12, 13, 17-23, 29-37 and 39 depend either directly or indirectly from independent claims 1, 6, 11 and 25 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 4 recites “a data setting unit that sets one of a number of times the identified input signal is checked, a time required to check the identified input signal, and a position of the identified input signal to be checked within a sequence of identified input signals to be checked, wherein if the signal checking unit has not checked one of the number of set times whether the identified input signal is abnormal and has not checked for the period of set time whether the identified input signal is abnormal, the signal checking unit continues checking whether the identified input signal is abnormal.” Therefore, claims 2-5, 7-10, 12, 13, 17-23, 29-37 and 39 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

II. Rejection under 35 U.S.C. § 103

In the Office Action, at page 10, numbered paragraph 7, claims 14-16, 24, 26-28 and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamashita. This rejection is respectfully traversed.

As discussed above with respect to independent claims 1, 6, 11 and 25, Yamashita does not discuss or suggest all the features of claims 1, 6, 11 and 25, from which claims 14-16, 24,

26-28 and 38 ultimately depend. Therefore, as claims 14-16, 24, 26-28 and 38 depend from claims 1, 6, 11 and 25, claims 14-16, 24, 26-28 and 38 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

III. New Claims

New independent claim 40 recites:

an input port changing unit for switching from the checked input port to a next input port when the input port is not receiving a normal input signal, wherein at least one of the input port has priority in an order of checking by the signal checking unit as compared to another input port.

New independent claim 47 recites:

an analog input port for receiving an analog signal;
a digital input port for receiving a digital signal; and
an input port changing unit for switching from the analog input port to the digital input port when the analog input port is not receiving a normal analog input signal.

New independent claim 48 recites:

an input port changing unit for switching from the digital input port to the analog input port when the digital input port is not receiving a normal digital input signal.

New independent claim 49 recites:

switching from the checked input port to a next input port to be checked when a normal input signal is not being received from the selected input port, wherein at least one of the input port has priority in an order of checking by the signal checking unit as compared to another input port.

Nothing in the reference relied upon discusses or suggests such. Therefore, new independent claims 40 and 47-49 patentably distinguish over the reference relied upon.

Dependent claims 41-46 and 50-58 depend either directly or indirectly from independent claims 40 and 49 and include all the features of their respective independent claims, plus additional claims that are not discussed or suggested by the reference relied upon. For example, claim 41 recites that "the order of checking of the input port is selected among a plurality of checking orders." Nothing in the reference relied upon discusses or suggests such. Therefore, claims 41-46 and 50-58 patentably distinguish over the reference relied upon.

Conclusion

In accordance with the foregoing, claims 1, 6, 11 and 25 have been amended. Claims 40-58 are added. Claims 1-58 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

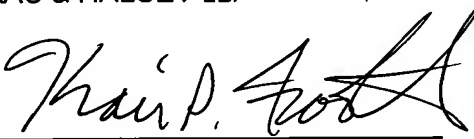
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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